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10/055,636	01/23/2002	William B. Paxton	23679-7004	9429

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EXAMINER
LE, JOHN H

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/055,636	Applicant(s) PAXTON ET AL.	
	Examiner John H Le	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-35 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 24-27 is/are allowed.

6)☒ Claim(s) 1-5,9,10,12,14-16,20-22,28-30 and 32-34 is/are rejected.

7)☒ Claim(s) 6-8,11,17-19 and 23 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 05 March 2002 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 4-5, 9-10, 12, 15-16, 20, 28-30, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirsch (USP 4,479,112) in view of Dahlke et al. (USP 6,456,414) and Andonovic et al. (USP 5,202,845).

Regarding claims 1, 12, 28, and 32, Hirsch teaches an optical controller (Col.16, lines 28-46) comprising: a eyepiece, an interior portion of a housing is viewable through said eyepiece (Col.7, line 63-Col.8, line 4); a plurality of lights 532, 534 (Fig.8), wherein each of said plurality of lights 532, 534 transmits a different color (Col.17, lines 10-18); a processor 558 coupled to said plurality of lights of the display 552 (Fig.10); a key caps 504-1(Fig.9), which read on a user response sensor coupled to said processor, said user response sensor having a first state of operation and a second state of operation (Col.18, lines 7-29); a memory coupled to said processor (Col.17, lines 51-53), said processor registers said state of operation of a user response in said memory(Col.17, line 61-Col.18, line 29), and a comparator circuit 562 coupled to said processor, said comparator circuit compares said user response to a predefined response (Col.3, lines 50-55).

Regarding claims 4-5, 15-16, 29-30, and 33-34, Hirsch teaches predetermined light sequence is random light sequence (Col.9, lines 46-55) or a non-random light sequence (Col.10, lines 46-47).

Regarding claims 9-10, and 20, Hirsch teaches optical controller comprising a controller power switch, wherein said controller power switch is vibration activated (Col.17, lines 10-18).

Hirsch fails to teach the processor sequentially pulses each light of said plurality of lights in a predetermined light sequence, wherein for each light of said plurality of lights pulsed by said processor, wherein the comparator circuit outputs a first signal if the user response does not match the predefined response for each light of said plurality of lights, and wherein the comparator circuit outputs a second signal if a predefined plurality of user responses match a predefined response sequence.

Dahlke et al. teach a controller 18 sequentially pulses each light of said plurality of lights in a predetermined light sequence, wherein for each light of a plurality of lights pulsed by said controller 18 (Fig.1A) (Col.3, line 64-Col.4, line 47).

Regarding claim 2, Dahlke et al. teach plurality of lights is comprised of a plurality of LEDs, each of said plurality of LEDs emitting light at a different wavelength (Col.4, lines 14-21, lines 58-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a controller 18 sequentially pulses each light of said plurality of lights as taught by Dahlke et al. in a secure data entry keyboard of Hirsch for the purpose of providing a sequential color scanner capable of generating both two and

three dimensional, moving color images with only one x- and y-deflection channel (Dahlke et al., Col.1, line 28-33).

Andonovic et al. teach an optical processing device for processing an optical data input to determine matching or mismatching between the data input and a predetermined reference (Abstract), monitoring the magnitude of one of said optical output pulses and comparing the monitored value with a preset value of a light pulse; and providing a subsequent output depending on the result of the comparison (Col.3, lines 1-13, Col.5, lines 18-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a step of comparing the monitored value with a preset value of a light pulse as taught by Andonovic et al. in a secure data entry keyboard of Hirsch in view of Dahlke et al. for the purpose of providing a signal processing system and a method and apparatus for processing optical signals which obviates or mitigates at least one of the aforementioned problems (Andonovic et al., Col.1, line 36-39).

3. Claims 3, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirsch (USP 4,479,112) in view of Dahlke (USP 6,456,414) and Andonovic et al. (USP 5,202,845) as applied to claims 1 and 12 above, and further in view of Beaumont (US 2001/0038452).

Regarding claim 3 and 14, the combination of Hirsch, Dahlke et al., and Andonovic et al. discussed supra, discloses the claimed invention except the plurality of lights is further comprised of an optical filter.

Beaumont teaches the plurality of lights is further comprised of optical filter 14, 15 ([0011]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include optical filter 14, 15 as taught by Beaumont in a secure data entry keyboard of Hirsch in view of Dahlke et al. and Andonovic et al. for the purpose of providing a system which enables consistent color from each of a plurality of luminaires, each of which use a coated optical filter (Beaumont, [0005]).

4. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirsch (USP 4,479,112) in view of Dahlke (USP 6,456,414) and Andonovic et al. (USP 5,202,845) as applied to claim 12 above, and further in view of Beaumont (US 2001/0038452).

Regarding claim 21-22, the combination of Hirsch, Dahlke et al., and Andonovic et al. discussed supra, discloses the claimed invention except a pressure sensitive switch.

Bell teaches a pressure-sensitive switch 35, which is mounted on the reader module, enables the battery power supply 22 to activate the micro controller/sequencer unit 28 (Col.7, lines 36-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a pressure-sensitive switch 35 as taught by Bell in a secure data entry keyboard of Hirsch in view of Dahlke et al. and Andonovic et al. for the purpose of providing an optical data reader module, which include a self-contained unit, with the data reader module sensing the encoded data (Bell, Col.2, lines 18-20).

Allowabl Subject Matter

5. Claims 6-8, 11, 17-19, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 24-27 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 6 and 17, none of the prior art of record teaches or suggests the combination of an optical controller, wherein the optical controller comprising a plurality of lights, wherein each of said plurality of lights transmits a different color; a user response sensor coupled to a processor, said user response sensor having a first state of operation and a second state of operation, a comparator circuit coupled to said processor, wherein for each light of said plurality of lights pulsed by said processor, said comparator circuit compares said user response to a predefined response, wherein said comparator circuit outputs a first signal if said user response does not match said predefined response for each light of said plurality of lights, and wherein said comparator circuit outputs a second signal if a predefined plurality of user responses match a predefined response sequence, wherein said user response sensor further comprising a detector for receiving reflected light from a user's eye, wherein said detector outputs a first detector output signal when an amplitude associated with said reflected light is less than a first predetermined amplitude, and wherein said detector outputs a second detector output signal when said amplitude associated with said

reflected light is greater than a second predetermined amplitude, wherein said first detector output signal corresponds to said first state of operation of said user response sensor, and wherein said second detector output signal corresponds to said second state of operation of said user response sensor. It is these limitations as they are claimed in the combination, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claims 11 and 23, 24, and 25, none of the prior art of record teaches or suggests the combination of an optical controller, wherein the optical controller comprising a plurality of lights, wherein each of said plurality of lights transmits a different color; a user response sensor coupled to a processor, said user response sensor having a first state of operation and a second state of operation, a comparator circuit coupled to said processor, wherein for each light of said plurality of lights pulsed by said processor, said comparator circuit compares said user response to a predefined response, wherein said comparator circuit outputs a first signal if said user response does not match said predefined response for each light of said plurality of lights, and wherein said comparator circuit outputs a second signal if a predefined plurality of user responses match a predefined response sequence, wherein the optical controller further comprising an electronic locking mechanism having a locked position and an unlocked position, wherein said electronic lock is maintained in said locked position when said comparator circuit outputs said first signal, and wherein said electronic lock is maintained in said unlocked position when said comparator circuit outputs said second signal. It is these limitations as they are claimed in the combination, which have not

been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Le whose telephone number is (703) 605-4361. The examiner can normally be reached on Monday to Friday from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. John Barlow, can be reached at (703) 308-3126. The facsimile number for Technology Center 2800 is (703) 308-5841.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist of the Technology Center whose telephone number is (703) 308-0956.

John H. Le

Patent Examiner-Group 2863

June 25, 2003

John Barlow
Supervisory Patent Examiner
Technology Center 2800